

1. (Currently Amended) A surveillance method for operating a general purpose computer to provide remote surveillance of an internal area of a building, comprising:

receiving a surveillance image from a local camera directed at the internal area of the building;

comparing the surveillance image with a reference image to produce a comparison result;

detecting presence of an activity condition based on the comparison result; and

notifying an interested user of the activity condition when the presence of the activity condition is detected,

configuring, prior to said receiving, comparing, detecting and notifying, said general purpose computing device so as to automatically notify the interested user via a predetermined mailing address when an activity condition is subsequently detected,

wherein said notifying includes at least transmitting the surveillance image to a remote computer over a global computer network automatically when the activity condition is detected, and

wherein said transmitting includes forming an electronic mail message having a predetermined mailing address, the predetermined mailing address being associated with the interested user and being provided during said configuring, and electronically mailing the surveillance image to the remote computer over the network using the electronic mail message.

2. A surveillance method as recited in claim 1, wherein said detecting of the presence of the activity condition comprises:

comparing the comparison result with a predetermined threshold;

detecting the presence of the activity condition when the comparison result exceeds the predetermined threshold; and

detecting the lack of presence of the activity condition when the comparison result does not exceed the predetermined threshold.

3. Cancelled.

4. (Previously Amended) A surveillance method as recited in claim 1, wherein the network comprises the Internet, and wherein said transmitting operates to transmit the surveillance image over the Internet to the remote computer.

5. A surveillance method as recited in claim 4, wherein the remote computer is one of a personal computer and a network server.

6. Cancelled.

7. (Previously Amended) A surveillance method as recited in claim 1, wherein said notifying further comprises:  
providing a distinctive audio or visual indication on the remote computer to notify the interested user of the receipt of the activity condition after the electronically mailed surveillance image arrives at the remote computer.

8. (Currently Amended) A system for providing remote visual monitoring of a location, said system comprising:

a camera for obtaining an image of the location;

a remote computer having a display device capable of viewing images, said remote computer being remote from the location;

a local general purpose computer operatively connected to said camera, said local general purpose computer operates to receive the image from the camera and to determine whether an activity condition is present,

wherein, prior to providing remote visual monitoring, said local general purpose computer is configured so as to automatically notify a predetermined user via a predetermined mailing address when an activity condition is subsequently detected,

wherein said local general purpose computer automatically forwards the image to said remote computer over a global computer network when the activity condition is present, and said local general purpose computer does not forward the image to said remote computer over the network when the activity condition is not present, and

wherein when forwarding the image to said remote computer over the network, said local general purpose computer automatically creates an electronic mail message for the predetermined ~~to a predetermined~~ user associated with the

remote computer, the electronic mail message having the image included or attached thereto, and then automatically sends the electronic mail message to said ~~remote computer~~ for the predetermined user via the predetermined mailing address.

9. (Previously Amended) A system as recited in claim 8, wherein the network comprises the Internet.

10. Cancelled.

11. A system as recited in claim 10, wherein said remote computer obtains the image that has been transmitted and displays the image on the display device.

12. (Previously Amended) A system as recited in claim 8, wherein said local general purpose computer determines whether an activity condition is present based on the image.

13. (Previously Amended) A system as recited in claim 8, wherein said system further comprises a motion detector for producing a motion indication signal, and

wherein said local general purpose computer receives the motion indication signal and determines whether an activity condition is present based on the motion indication signal.

14. A system as recited in claim 13, wherein said motion detector and said camera is directed at the location from approximately the same direction.

15. A system as recited in claim 14, wherein said motion detector is mounted on said camera.

16. (Previously Amended) A system as recited in claim 8, wherein said system further comprises a security system having at least one sensor, and wherein said security system detects an alarm condition, the activity condition is made to be present.

17. (Previously Amended) A system as recited in claim 8, wherein said system further comprises a security system having at least one sensor, and

wherein said security system detects an alarm condition, said local general purpose computer causes the image and alarm status information to be forwarded over the network to said remote computer.

18. (Previously Amended) A system as recited in claim 17, wherein the image and the alarm status information are displayed on a display device of said remote computer.

19. Cancelled.

20. Cancelled

21. Cancelled

22. Cancelled

23. Cancelled

24. Cancelled

25. Cancelled

26. (Currently Amended) A method for detecting an activity condition using a camera, comprising the acts of:

(a) receiving a reference image from a camera directed in a predetermined direction;

(b) storing a reference image;

(c) receiving a current image from a camera directed in the predetermined direction;

(d) comparing the current image with the reference image to detect an activity condition; and

(e) signaling an alarm condition when said comparing detects the activity condition; the signaling of the alarm condition including the automatic transmission of a ~~message~~ an electronic mail message over a network to a remote computer, the message including a video clip ~~at least one image from the camera~~ to enable

enabling viewing of the activity condition that caused the signaling of the alarm condition,

wherein the electronic mail message is transmitted to an electronic mail address as was previously arranged during configuration.

27. A method as recited in claim 26, wherein said signaling (e) of the alarm condition produces an audio sound.

28. A method as recited in claim 26, wherein said signaling (e) of the alarm condition comprises:

storing a sequence of images from the camera upon detecting the activity condition so as to obtain a visual record of the alarm condition.

29. A method as recited in claim 28, wherein said signaling (e) of the alarm condition further comprises:

producing an audio sound upon detecting the activity condition.

30. A method as recited in claim 29, wherein said comparing (d) of the current image with the reference image to detect the activity condition comprises:

determining a difference value between the current image and the reference image;

comparing the difference value with a predetermined threshold value; and

detecting the activity condition when the difference value exceeds the predetermined threshold value.

31. (Currently Amended) A method as recited in claim 28, wherein the electronic mail message being transmitted includes a plurality of images temporally proximate to the detection of the activity condition ~~the activity condition is indicates detection of an intruder, and wherein the sequence of images defines the video clip.~~

32. Cancelled

33. Cancelled

34. Cancelled

35. Cancelled

36. Cancelled

37. Cancelled

38. Cancelled

39. (Currently Amended) A method for operating a general purpose computer to detect an activity condition using a camera, comprising the acts of:

(a) receiving a reference image from a camera directed in a predetermined direction;

(b) storing a reference image;

(c) receiving a current image from a camera directed in the predetermined direction;

(d) comparing the current image with the reference image to detect an activity condition;

(e) signaling an alarm condition when said comparing detects the activity condition without using any special purpose hardware other than the general purpose computer and the camera; and

(f) transmitting a message over a global computer network to a remote computer, the message including at least the current image, wherein the message being transmitted to the remote computer is an electronic mail message; and

(g) configuring, prior to said receiving (a), storing (b), comparing (d), signaling (e) and transmitting (f), the general purpose computing device so as to automatically transmit an electronic mail message using a predetermined mailing address when an activity condition is subsequently detected.

40. A method as recited in claim 39, wherein said signaling (e) of the alarm condition produces an audio sound.

41. A method as recited in claim 40, wherein said signaling (e) of the alarm condition comprises:

storing a sequence of images from the camera upon detecting the activity condition so as to obtain a visual record of the alarm condition.

42. A method as recited in claim 41, wherein said signaling (e) of the alarm condition further comprises:

producing an audio sound upon detecting the activity condition.

43. A method as recited in claim 42, wherein said comparing (d) of the current image with the reference image to detect the activity condition comprises:

determining a difference value between the current image and the reference image;

comparing the difference value with a predetermined threshold value; and

detecting the activity condition when the difference value exceeds the predetermined threshold value.

44. (Currently Amended) A method as recited in claim 41, wherein the electronic mail message being transmitted includes a plurality of images temporally proximate to the detection of the activity condition ~~the activity condition indicates detection of an intruder, and wherein the sequence of images is a video clip.~~

45. Cancelled.

46. Cancelled.

47. (Previously Amended) A method as recited in claim 39, wherein said comparing (d) of the current image with the reference image to detect the activity condition comprises:

determining a difference value between the current image and the reference image;

comparing the difference value with a predetermined threshold value; and

detecting the activity condition when the difference value exceeds the predetermined threshold value.

48. A method as recited in claim 47, wherein the message includes at least a video clip containing images from the camera that were obtained from the camera during or proximate in time to when the activity condition was detected, thereby enabling viewing of the activity condition that caused the signaling of the alarm condition.

49. (Previously Amended) A method for operating a general purpose computer to detect an activity condition using a camera, comprising the acts of:

(a) receiving a reference image from a camera directed in a predetermined direction;

(b) storing a reference image;

(c) receiving a current image from a camera directed in the predetermined direction;

(d) comparing the current image with the reference image to detect an activity condition;

(e) signaling an alarm condition when said comparing detects the activity condition without using any special purpose hardware other than the general purpose computer and the camera; and

(f) transmitting at least the current image over a network to a remote computer upon detecting the activity condition,

wherein the network comprises the Internet, and

wherein the remote computer is an Internet server that stores images from a plurality of different cameras, and wherein an interested user is able to view at least certain of the images by accessing the Internet server via a web browser application on a user computer.

50. A method as recited in claim 49, wherein said transmitting operates to transmit at least a video clip containing images from the camera that were obtained from the camera during or proximate in time to when the activity condition was detected.

51. Cancelled.

52. (Previously Amended) A method as recited in claim 49, wherein said comparing (d) of the current image with the reference image to detect the activity condition comprises:



determining a difference value between the current image and the reference image;  
detecting the activity condition based on the different value.

53. A surveillance method for operating a general purpose computer to provide remote surveillance of an internal area of a building, comprising:

receiving a surveillance image from a local camera directed at the internal area of the building;

comparing the surveillance image with a reference image to produce a comparison result;

detecting presence of an activity condition based on the comparison result;  
and

notifying an interested user of the activity condition when the presence of the activity condition is detected,

wherein said notifying includes at least transmitting the surveillance image to a remote computer over a network automatically when the activity condition is detected,

wherein the network comprises the Internet, and

wherein the remote computer is an Internet server that stores images from a plurality of different cameras, and wherein the interested user is thereafter able to view at least certain of the images from the local camera by accessing the Internet server via a web browser application on a user's computer.

54. A surveillance method as recited in claim 53, wherein said notifying further includes sending an electronic mail message to the user's computer to inform the user of the activity condition or the availability of at least the surveillance image at the Internet server.

55. A surveillance method as recited in claim 54, wherein said detecting of the presence of the activity condition comprises:

- comparing the comparison result with a predetermined threshold;
- detecting the presence of the activity condition when the comparison result exceeds the predetermined threshold; and
- detecting the lack of presence of the activity condition when the comparison result does not exceed the predetermined threshold.

56. A surveillance method as recited in claim 55, wherein said method operates without using any special purpose hardware other than the general purpose computer and the local camera.

57. A surveillance method as recited in claim 54, wherein said method operates without using any special purpose hardware other than the general purpose computer and the local camera.

58. A system for providing remote visual monitoring of a location, said system comprising:

- a camera for obtaining an image of the location;
- an Internet server for storing images, said remote computer being remote from the location;
- a user's computer having a display device capable of viewing images, said user computer being remote from the location;
- a local general purpose computer operatively connected to said camera, said local general purpose computer operates to receive the image from the camera and to determine whether an activity condition is present,
  - wherein said local general purpose computer automatically forwards the image to said Internet server over a network when the activity condition is present, and said local general purpose computer does not forward the image to said Internet server over the network when the activity condition is not present,
  - wherein the network comprises the Internet, and
  - wherein said Internet server stores the images forwarded thereto from said local general purpose computer, and wherein an interested user is thereafter able to view the images from the local camera by accessing the Internet server via a web browser application on said user's computer.

59. A system as recited in claim 58, wherein said system further operates to send an electronic mail message to the interested user to inform the interested user of the activity condition or the availability of images at the Internet server.

60. A system as recited in claim 58, wherein said local general purpose computer forwards the image to said Internet server by establishing a network connection to the Internet, and directing the transmission of the image over the Internet to the Internet server.

61. A system as recited in claim 58, wherein said local general purpose computer determines whether an activity condition is present based on the image.

62. A system as recited in claim 58, wherein said system further comprises a motion detector for producing a motion indication signal, and

wherein said local general purpose computer receives the motion indication signal and determines whether an activity condition is present based on the motion indication signal.

63. A system as recited in claim 62, wherein said motion detector is mounted on said camera.

64. A system as recited in claim 58, wherein said system further comprises a security system having at least one sensor, and

wherein said security system detects an alarm condition, the activity condition is made to be present.

65. A system as recited in claim 58, wherein said system further comprises a security system having at least one sensor, and

wherein said security system detects an alarm condition, said local general purpose computer causes the image and alarm status information to be forwarded over the network to said Internet server.

66. A system as recited in claim 65, wherein the image and the alarm status information are displayed on the display device of said user's computer after the interested user accesses the Internet server.